

INDUCTANCE TYPE PROBE CODE 9420-AP02

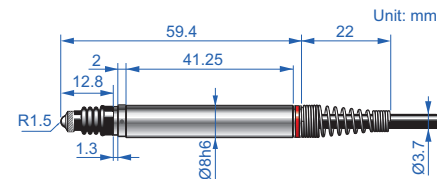
IP65
WATERPROOF



- Ultra-short length, built-in precision linear ball bearings
- For highly accurate and repeatable displacement measurements of displacement, deformation, dimension, vibration, thickness, expansion, etc. in quality control and metrology applications

SPECIFICATION

Range	±0.9mm
Resolution	0.1µm
Accuracy	±0.3+3× L ³µm, (L is measuring length in mm)
Repeatability	0.15µm
Thermal drift	0.25µm/°C
Mechanical stroke	2.2mm
Sensor type	LVDT
Measuring force	0.75N (measuring rod vertical down at 0±25% potential)
Protective cover	fluorinated elastomer
Contact type	carbide
Insert thread	M2.5
Sampling frequency	≥80ms
Operation environment	work: -10~60°C; storage: -20~100°C
Cable length	2m (customized from 2~5m)
Output interface	5-wire aviation interface
Weight	16g



DIGITAL LINEAR GAUGES

**INSPECTION
CERTIFICATE**



ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF

DUSTPROOF
WATERPROOF

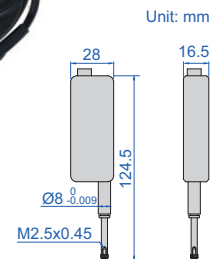
- Scale type: optical grating
- Absolute encoder, the original data remains after power off
- Digital signal output, amplifier is not required
- Measuring force: ≤1.5N
- Dust/waterproof: IP43/IP66
- Baud rate: 9600 (can be customized)
- Cable length: 3m (can be customized)
- Optional accessory: software of linear gauge (code: **7130-SOFTWARE**, 8 probes can be connected at the same time, need to purchase the corresponding hubs)



7130-10



7130-10L



Dust/waterproof IP43, resolution 0.1µm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7130-10	0-12.5mm	0.5µm	1µm	horizontal	RS232, TTL level	
7130-10L	0-12.5mm	0.5µm	1µm	vertical	RS232, TTL level	
7130-11	0-12.5mm	0.5µm	1µm	horizontal	RS232, 232 level	
7130-11L	0-12.5mm	0.5µm	1µm	vertical	RS232, 232 level	
7130-12	0-12.5mm	0.5µm	1µm	horizontal	RS485 (VCC+5~12V)	
7130-12L	0-12.5mm	0.5µm	1µm	vertical	RS485 (VCC+5~12V)	
7130-13	0-12.5mm	0.5µm	1µm	horizontal	RS232, TTL level	
7130-13L	0-12.5mm	0.5µm	1µm	vertical	RS232, TTL level	
7130-14	0-12.5mm	0.5µm	1µm	horizontal	RS232, 232 level	
7130-14L	0-12.5mm	0.5µm	1µm	vertical	RS232, 232 level	

To be continued

PNEUMATIC DIGITAL LINEAR GAUGES

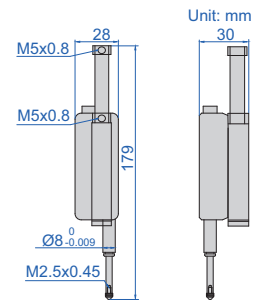
DUSTPROOF
WATERPROOF

ABSOLUTE ENCODER, THE ORIGINAL
DATA REMAINS AFTER POWER OFF



7134-10L

- Scale type: optical grating
- Absolute encoder, the original data remains after power off
- Digital signal output, amplifier is not required
- Air pressure: 0.2-0.5MPa
- Measuring force: $\leq 1.5N$
- Dust/waterproof: IP43/IP66
- Baud rate: 9600 (can be customized)
- Cable length: 3m (can be customized)
- Optional accessory: software of linear gauge (code: **7130-SOFTWARE**, 8 probes can be connected at the same time, need to purchase the corresponding hubs)



Dust/waterproof IP43, resolution 0.1µm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7134-10	0-12.5mm	0.5µm	1µm	horizontal	RS232, TTL level	
7134-10L	0-12.5mm	0.5µm	1µm	vertical	RS232, TTL level	
7134-11	0-12.5mm	0.5µm	1µm	horizontal	RS232, 232 level	
7134-11L	0-12.5mm	0.5µm	1µm	vertical	RS232, 232 level	
7134-12	0-12.5mm	0.5µm	1µm	horizontal	RS485 (VCC+5~12V)	
7134-12L	0-12.5mm	0.5µm	1µm	vertical	RS485 (VCC+5~12V)	
7134-13	0-12.5mm	0.5µm	1µm	horizontal	RS232, TTL level	
7134-13L	0-12.5mm	0.5µm	1µm	vertical	RS232, TTL level	
7134-14	0-12.5mm	0.5µm	1µm	horizontal	RS232, 232 level	
7134-14L	0-12.5mm	0.5µm	1µm	vertical	RS232, 232 level	

Dust/waterproof IP43, resolution 0.5µm

Code	Range	Repeatability	Accuracy	Outgoing cable direction	Output signal	Output interface
7134-20	0-12.5mm	1.5µm	3µm	horizontal	RS232, TTL level	
7134-20L	0-12.5mm	1.5µm	3µm	vertical	RS232, TTL level	
7134-21	0-12.5mm	1.5µm	3µm	horizontal	RS232, 232 level	
7134-21L	0-12.5mm	1.5µm	3µm	vertical	RS232, 232 level	
7134-22	0-12.5mm	1.5µm	3µm	horizontal	RS485 (VCC+5~12V)	
7134-22L	0-12.5mm	1.5µm	3µm	vertical	RS485 (VCC+5~12V)	
7134-23	0-12.5mm	1.5µm	3µm	horizontal	RS232, TTL level	
7134-23L	0-12.5mm	1.5µm	3µm	vertical	RS232, TTL level	
7134-24	0-12.5mm	1.5µm	3µm	horizontal	RS232, 232 level	
7134-24L	0-12.5mm	1.5µm	3µm	vertical	RS232, 232 level	

To be continued

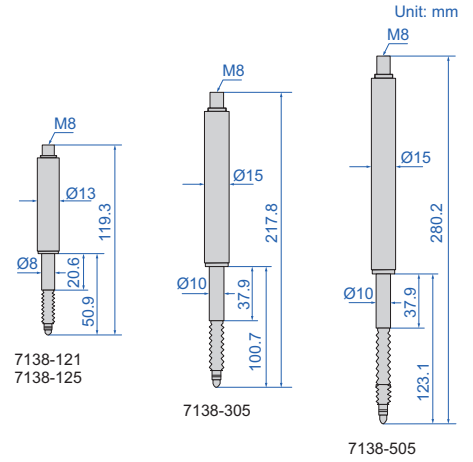
IP67
WATERPROOF



LINEAR GAUGES



7138-121



- Linear gauge type: optical grating
- Dust/waterproof: IP67
- Optional accessory: display unit (code **7131-1A**, can output keyboard signal, transmit data to excel, word, txt etc., also can output serial signal and transmit data to serial communication software)

L-connection cable
(optional)



straight connection cable
(optional)



application



SPECIFICATION

Code	7138-121	7138-125	7138-305	7138-505
Range	12mm	12mm	30mm	50mm
Resolution	0.1µm	0.5µm	0.5µm	0.5µm
Accuracy	±1µm	±2µm	±3µm	±3.5µm
Power supply	DC 5V, 300mA			
Output signal *	TTL signal			
Operation environment	0~40°C, 20~80%RH (non-condensing)			
Storage environment	-10~60°C, 20~80%RH (non-condensing)			
Dimension	Ø13×120mm		Ø15×218mm	Ø15×281mm
Weight	60g		130g	170g

* Output signal 485 or 232 is optional

OPTIONAL ACCESSORY

Display unit	7131-1A
L-connection cable	7138-L
Straight connection cable	7138-Z

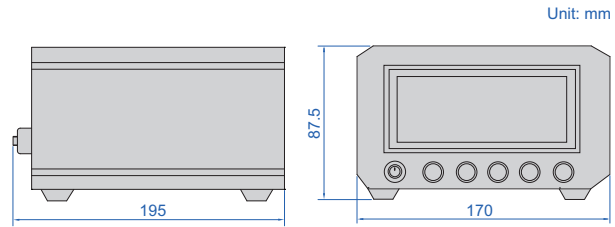
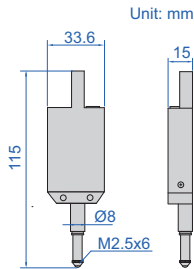
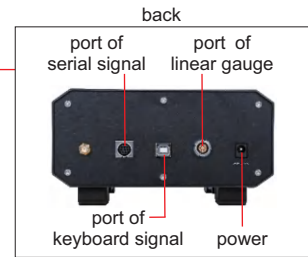
LINEAR GAUGES AND DISPLAY UNIT



linear gauge
7131-01



display unit
7131-1A



- Linear gauge type: optical grating
- Display unit: display displacement data in real time, data preset, set tolerance and make judgment (out of upper tolerance, within tolerance, out of lower tolerance), set zero, change measuring direction, resolution (0.1µm/1µm), unit switch (µm/mm/inch)
- Two data transmission methods: can output keyboard signal and data can be transmitted to excel, word, txt etc, can also output serial signal and transmit data to serial communication software

LINEAR GAUGE SPECIFICATION

Code	7131-01	7131-02
Range	12.5mm	12.5mm
Resolution	0.1µm	1µm
Accuracy (19~20°C)	1µm	3µm
Repeatability	0.2µm	2µm
Linear gauge type	optical grating	
Working life	ten million times	
Dust/waterproof	IP50	
Measuring force	0.7±0.3N	
Cable length	900mm	
Operation environment	0~40°C, 20~80%RH	
Power supply	5~24V	
Dimension (L×W×H)	33.6×15×115mm	
Weight	133g	

spindle lift knob is included



application



DISPLAY UNIT SPECIFICATION

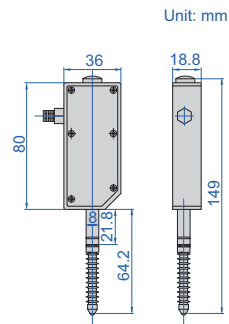
Code	7131-1A
Display	4" LCD screen
Unit	µm, mm, inch
Quantity of linear gauge to be connected	1 pc
Dimension (L×W×H)	170×195×87.5mm
Weight	1.45kg

IP65
WATERPROOF

CAPACITANCE LINEAR GAUGES



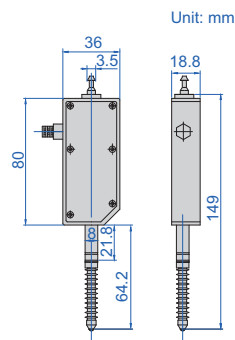
7107-12



7107-11
7107-12



7107-12V



7107-11V
7107-12V

- Capacitance type linear encoder
- Shock-proof, water proof, dust proof, suitable for high speed movement, long working life
- Optional: display unit **7106-1A**, multichannel interface box **7107-1** or **7107-2**

SPECIFICATION

Code	7107-11	7107-12	7107-11V	7107-12V
Measuring range	12mm/0.47"	12mm/0.47"	12mm/0.47"	12mm/0.47"
Resolution	0.01mm/0.0004"	0.001mm/0.00004"	0.01mm/0.0004"	0.001mm/0.00004"
Accuracy	20µm	5µm	20µm	5µm
Hysteresis	10µm	2µm	10µm	2µm
Driving type	spring		pneumatic	
Measuring force	1.5N		adjusted by air pressure	
Measuring principle	capacitance type linear encoder			
Voltage	5V			
Sampling frequency	100 times/sec			
Working life	ten million times			
Dust/waterproof	IP65			
Cable length	2m			
Data output	RS232			

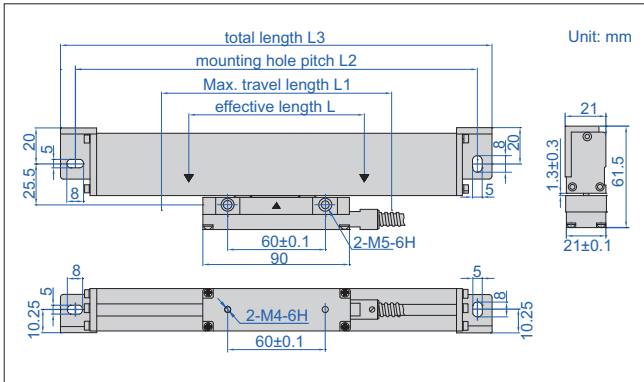
IP54
WATERPROOF



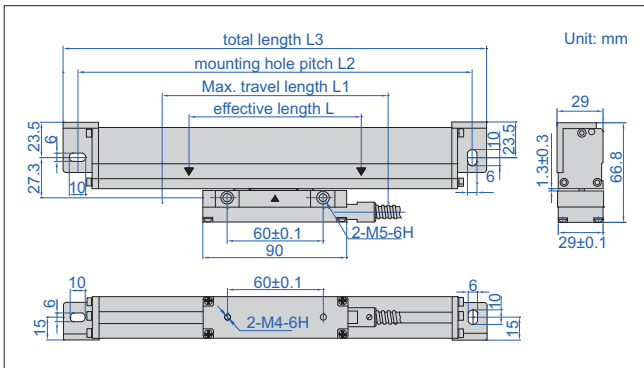
ISL-A1-300

- Optical TTL (Through-The-Lens) detection.
These optical TTL linear scales use an transistor logic to transmit and record high-resolution distance measurements. They are the most accurate type of encoder and are paired with **ISL-DR2/DR3** and **ISL-LCD7** (digital readout)

Series ISL-A1 and ISL-A5



Series ISL-B5

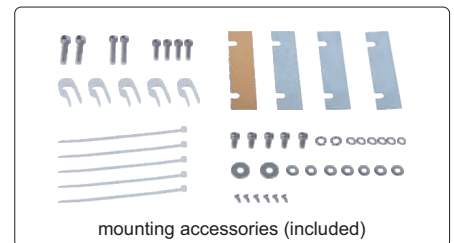
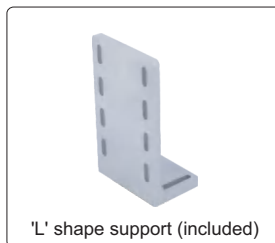


LINEAR SCALES (TTL SIGNAL)

Effective length (L)	Code		
	Thin type		Thick type
	Series ISL-A1	Series ISL-A5	Series ISL-B5
50mm	ISL-A1-50	ISL-A5-50	ISL-B5-50
100mm	ISL-A1-100	ISL-A5-100	ISL-B5-100
150mm	ISL-A1-150	ISL-A5-150	ISL-B5-150
200mm	ISL-A1-200	ISL-A5-200	ISL-B5-200
250mm	ISL-A1-250	ISL-A5-250	ISL-B5-250
300mm	ISL-A1-300	ISL-A5-300	ISL-B5-300
350mm	ISL-A1-350	ISL-A5-350	ISL-B5-350
400mm	ISL-A1-400	ISL-A5-400	ISL-B5-400
450mm	ISL-A1-450	ISL-A5-450	ISL-B5-450
500mm	ISL-A1-500	ISL-A5-500	ISL-B5-500
550mm	ISL-A1-550	ISL-A5-550	ISL-B5-550
600mm	ISL-A1-600	ISL-A5-600	ISL-B5-600
650mm	ISL-A1-650	ISL-A5-650	ISL-B5-650
700mm	ISL-A1-700	ISL-A5-700	ISL-B5-700
750mm	ISL-A1-750	ISL-A5-750	ISL-B5-750
800mm	ISL-A1-800	ISL-A5-800	ISL-B5-800
850mm	ISL-A1-850	ISL-A5-850	ISL-B5-850
900mm	ISL-A1-900	ISL-A5-900	ISL-B5-900
950mm	ISL-A1-950	ISL-A5-950	ISL-B5-950
1000mm	ISL-A1-1000	ISL-A5-1000	ISL-B5-1000
1100mm			ISL-B5-1100
1200mm			ISL-B5-1200
1300mm			ISL-B5-1300
1400mm			ISL-B5-1400
1500mm			ISL-B5-1500
1600mm			ISL-B5-1600
1700mm			ISL-B5-1700
1800mm			ISL-B5-1800
1900mm			ISL-B5-1900
2000mm			ISL-B5-2000
2100mm			ISL-B5-2100
2200mm			ISL-B5-2200
2300mm			ISL-B5-2300
2400mm			ISL-B5-2400
2500mm			ISL-B5-2500
2600mm			ISL-B5-2600
2700mm			ISL-B5-2700
2800mm			ISL-B5-2800
2900mm			ISL-B5-2900
3000mm			ISL-B5-3000
3100mm			ISL-B5-3100
3200mm			ISL-B5-3200

STANDARD DELIVERY

Main unit	1 pc
'L' shape support	1 pc
Anti-dust cover	1 pc
Plain base	1 pc (for L≥1500mm)
Mounting accessories	1 package



To be continued

